

nih record



ABOVE • Caricatures were part of the fun at FAES's recent anniversary lunch. See p. 12.

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Annual Poster Day Is Bigger with ARRA Funds

Summer Interns Keen on NIH Environment, Atmosphere of Research

By Carla Garnett

The NIH Summer Research Program held its largest Poster Day in recent memory on Aug. 6 with 778 interns presenting their work in three 2-hour sessions throughout the day. More than 1,100 students worked intramurally in 22 institutes and centers and FDA this summer. The American Recovery and Reinvestment Act stimulus NIH received earlier this year provided funding for 55 more summer research interns in 2009 than would have been hired otherwise.

According to results from a survey of summer interns, efforts to engage the next generation of medical scientists and keep the pipeline of young investigators flowing are being well received. Many survey responses mentioned NIH's "supportive environment" and its "dynamic research atmosphere." More than 375

SEE POSTER DAY, PAGE 6



Alex Mattia (l) and Sarat Muhammad, two of nearly 800 summer interns, share their research at Poster Day.

Kennedy Remembered as Friend of NIH

Sen. Edward M. Kennedy (D-MA), who died Aug. 25 of brain cancer, figured prominently in virtually all health and health research legislation since he was elected to the Senate in 1962.

For NIH, his interests coincided with his long tenure on what is now the health, education, labor and pensions committee, which oversees all authorizing legislation relative to NIH.

His interests spanned every health-related topic that flowed through Congress, including genetic nondiscrimination, human fetal tissue transplantation, embryonic stem cells, therapeutic cloning, traumatic brain injury, pediatric cardiovascular disease, juvenile arthritis, bioengineering research, AIDS research (including the establishment of a federal program to address the then-emerging issue of AIDS—the HOPE Act), clinical research, women's health research, pediatric research, sleep disorders research, study on the use of legal versus illegal drugs, research to improve the quality of life for cancer patients and cancer survivors, minority health and health dispari-

SEE KENNEDY, PAGE 4

'A Framingham Study for Mental Health' Army/NIMH Study Is Focus of Media Roundtable

By Charlotte Armstrong

The Pentagon was the setting for a media roundtable July 16 at which the U.S. Army and NIMH jointly announced the selection of a research consortium to conduct a \$50 million study of suicide and mental health in the military. NIMH is carrying out the Army-funded Study to Assess Risk and Resilience in Servicemembers (Army STARRS) under a cooperative agreement mechanism. It is the largest study of mental health among military personnel ever undertaken.

The study is a response to the Army's request to NIMH to enlist the most promising scientific approaches for addressing the rising suicide rate among soldiers. A memorandum of agreement between NIMH and the Army, signed in October 2008, authorized NIMH to undertake the investigation with Army funding (*NIH Record*, Nov. 28, 2008). Suicide rates among Army personnel have risen substantially since

SEE SUICIDE STUDY, PAGE 8



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briefs

Car Free Day, Sept. 22

On Tuesday, Sept. 22, NIH will join with the Metropolitan Washington Council of Governments and other employers in the Washington area in celebrating Car Free Day. If you currently travel to work by bicycle, carpool, mass transit, vanpool or by foot, go to <http://carfreemetrodc.com/Home/tabid/54/Default.aspx> and make the pledge that you will be car free on Sept. 22. NIH employees not currently participating in alternative transportation may go to the NIH Transportation web site <http://dtts.ors.od.nih.gov/transportation.htm> to see a range of commuter options. As an incentive for those who drive alone or do not receive a transit subsidy and would like to try NIH Transshare for this day, you may sign up to receive up to \$10 in Metrocheks at the NIH Parking Office (31/B3Bo4) between now and Sept. 21. Contractors are not eligible for the NIH Transshare Program. All participants must sign an agreement to use these non-transferable funds for mass transit on Sept. 22 and be "car free." For more information, contact Joe Cox at the Employee Transportation Service Office, (301) 402-RIDE (7433).

Fall 2009 Parenting Resources Offered

The popular "Ask the Parenting Specialist" is being offered both on- and off-campus this fall. Take the opportunity to sit down for 10 minutes and talk with a parenting expert about any child-related issue on your mind. No appointment necessary—just stop by during your lunch hour. All sessions are free.

On Campus—Tuesday, Sept. 22 in Bldg. 10, B1 cafeteria, 11:30 a.m. to 1:30 p.m.

Off Campus—Wednesday, Oct. 7 in Rockledge I cafeteria, 11:30 a.m. to 1:30 p.m.

"Lunch and Learn" parenting seminars will also be offered this fall. Bring your lunch and attend one of these free informative discussions.

Wednesday, Sept. 23, noon to 1 p.m., Bldg. 50, Rm. 1227, Understanding the Spirit of Your 2-Year-Old, presented by Hazel Osborn of LifeWork Strategies.

Wednesday, Sept. 30, noon to 1 p.m., Bldg. 50, Rm. 1227, Starting the School Year Off on the Right Foot, presented by Chris Essex of LifeWork Strategies.

For those unable to attend in person, the parenting seminars will be available at <http://videocast.nih.gov>.

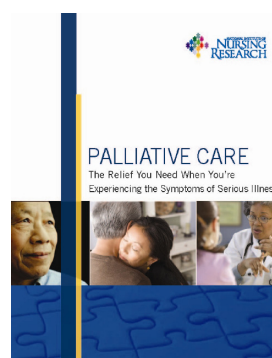
Individuals with disabilities who need sign language interpreters and/or reasonable accommodation to participate in these sessions should contact Tonya Lee at (301) 402-8180.

First Anniversary of 'Tobacco Free' NIH

With Oct. 1 fast approaching, NIH is gearing up to celebrate the 1-year "health-iversary" of going tobacco free. Tobacco Free NIH and the trans-NIH tobacco and nicotine research interest group (TANRIG, <http://sigs.nih.gov/tobacco>) welcome stories from people across campus who have used the tobacco free NIH campaign as an incentive or motivation to quit. Tell us your successes and struggles. If your story is highlighted, you could provide the inspiration and motivation for others' success. Send stories to Allison Hoffman (HoffmanAL@nida.nih.gov).

If you are still using tobacco, think about using Oct. 1 as a quit date. Tobacco Free NIH can help. If you are a federal employee, you have access to free tobacco cessation treatment services, referrals to smoking cessation support groups and up to \$200 for prescription or over-the-counter cessation medications. Also, anyone can get online support through smokefree.gov and its sister site, women.smokefree.gov. Smoking cessation counselors are also available through the National Cancer Institute by calling 1-877-44U-QUIT or through your state by calling 1-800-QUIT-NOW (TTY 1-800-332-8615). Smoking cessation counselors can also provide information and advice about quitting using real-time text messaging through NCI's LiveHelp service.

For more information on these and other resources for quitting, see <http://tobaccofree.nih.gov/whatistf.htm#resources>. For more information about TANRIG, contact Hoffman at the email address above.



Brochure on Palliative Care Offers Answers, Highlights Benefits

NINR recently released a new brochure, *Palliative Care: The Relief You Need When You're Experiencing the Symptoms of Serious Illness*. This 14-page publication seeks to increase awareness of palliative care's many benefits—including

reducing pain and other distressing symptoms of illnesses and medical treatments—and dispels the myths surrounding palliative care. Additionally, the brochure addresses how palliative care is different from hospice care, how it works in tandem with medical care, how and when to request palliative care and where to get more information. To read the booklet, visit www.ninr.nih.gov/NewsAndInformation/NINRPublications/. For a free print copy of this publication or to order additional quantities, stop by the NINR office on the B wing, 5th floor of Bldg. 31, email info@ninr.nih.gov or call (301) 496-0207.

nih record

Ten Reasons to Attend the Pioneer Award Symposium, Sept. 24-25 in Masur

On Sept. 24-25, dozens of the nation's most innovative and imaginative researchers will converge on campus to share their research aims and results at the NIH Director's Pioneer Award Symposium. The fifth annual conference, to be held in Masur Auditorium, Bldg. 10, will showcase scientific creativity in a broad array of areas.

The Pioneer Award supports scientists who take bold—and often unconventional—approaches to major challenges in biomedical and behavioral research. The symposium will also feature recipients of the NIH Director's New Innovator Award, a similar program that focuses on investigators in the early stages of their careers. Both programs are part of the NIH Roadmap for Medical Research and complement other NIH efforts to fund potentially transformative research and early career scientists.

Here are 10 reasons to attend this special event:

- **Snapshots from the Labs.** The symposium will feature a fast-paced series of talks by last year's Pioneer Award recipients about the progress they have made on their ambitious projects.
- **Commencement Celebration.** Beginning a new tradition this year, the first “graduating class” of Pioneers—nine researchers who received the 5-year, \$2.5 million grants in 2004—will share what they have accomplished with their awards.
- **Keynote on Innovation.** Dr. Arthur P. Molella will speak about the “habits and habitats” of inventive people. As founding director of the Smithsonian's Lemelson Center for the Study of Invention and Innovation, Molella has focused on innovative science, technology and culture in his numerous exhibitions, interdisciplinary programs, books and articles.
- **Varied Topics.** Since the awardees hail from many different scientific disciplines, the symposium promises to offer exciting updates in areas as wide-ranging as nanomedicine and “bio-barcodes,” stem cell differentiation, how the immune system protects some people from HIV/AIDS and computer simulations of how perception arises in the human brain.
- **Thematic Sessions.** Talks are grouped by topic, so you can choose to attend all sections or only the sessions that interest you the most.
- **Posters and Receptions.** In the afternoons, informal receptions will accompany poster presentations by Pioneers and New Innovators.
- **Meet and Mingle.** Several scheduled breaks will give you more opportunities to interact with symposium participants.
- **New Awardees.** The meeting will kick off with the

announcement of the 2009 Pioneer and New Innovator Award recipients.

- **Roundtable Discussion.** A 45-minute roundtable discussion will focus on the interplay between technology and hypothesis-driven research.
- **Easy to Attend (or Watch).** The symposium is free, open to the public and does not require registration. The agenda is at <http://nihroadmap.nih.gov/pioneer/Symposium2009/index.aspx> and the talks will be videocast live and archived at <http://videocast.nih.gov/>.—Stephanie Dutchen

UMass's Lian To Speak, Sept. 30

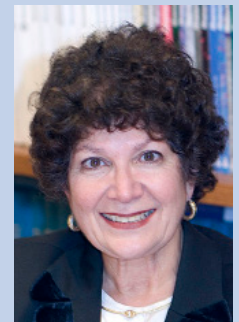
On Wednesday, Sept. 30 at 2 p.m., Dr. Jane Lian will speak on “New Dimensions of Transcriptional Control in the Skeleton,” in Lipsett Amphitheater, Bldg. 10. Her talk is part of NIDCR's seminar series “From Basic Research to Therapy—The Latest Frontier.”

Lian is a leader in the fields of bone biology and connective tissue disorders. Her work has contributed to our current understanding of the molecular events that control normal and abnormal skeletal development and cancer metastasis to bone. She will discuss her recent research targeting transcriptional and epigenetic factors as well as microRNAs for treating conditions such as osteoporosis and genetic disorders that affect craniofacial bone.

Lian is a professor of cell biology at the University of Massachusetts Medical School. She earned a Ph.D. from Boston University and did postdoctoral training at NIDCR and Harvard Medical School. Her research has been recognized by many awards including a Kappa Delta Award from the American Academy of Orthopedic Surgeons and the William Neuman Award from the American Society for Bone and Mineral Research that she shared with Dr. Gary Stein. She also serves on the research advisory board of the Shriners Hospitals for Children.

If you wish to meet Lian during her visit, contact Dr. Nadya Lumelsky at (301) 594-7703 or nadyal@nidcr.nih.gov.

Sign language interpretation will be provided. For more information, or for reasonable accommodation, contact Mary Daum, (301) 594-7559, and/or the Federal Relay (1-800-877-8339). The lecture will be videocast live at <http://videocast.nih.gov>.



Congress Recognizes NEI's 40th Anniversary, Decade of Vision

The National Eye Institute has been celebrating its 40th anniversary in 2009 with NIH-wide events and scientific symposia. Congress also recently recognized this milestone and the crucial role of NEI in vision research and eye health. The U.S. House and Senate passed resolutions that acknowledged NEI's four decades of leadership in basic, clinical, preventive, epidemiologic and collaborative vision research. In addition, they declared the years 2011-2020 as the “Decade of Vision,” to maintain public health awareness of eye-related conditions and emphasize the importance of federal support for vision research.

This summer, the Alliance for Eye and Vision Research (AEVR) hosted a Capitol Hill reception recognizing the 40th anniversary of NEI. The reception brought together members of Congress and their staff with the vision community and its coalition partners. AEVR is an educational foundation dedicated to educating Congress and the public about the value of eye and vision research.

NEI was established by Congress in 1968 and currently contributes to over 1,600 grants and training awards made to scientists at more than 250 medical centers, hospitals and universities. To learn more about NEI, visit www.nei.nih.gov.

KENNEDY

CONTINUED FROM PAGE 1

Above, Sen. Edward Kennedy (r) confers with Dr. Francis Collins, who was then director of NHGRI, at a December 2006 meeting.

Shown below are (from l) Jean Kennedy Smith, Vicki Kennedy, Sen. Kennedy and Eunice Kennedy Shriver at last year's ceremony renaming NICHD in Shriver's honor.



ties and patient access to clinical trials.

On his watch, NIDCD, the National Center for Minority Health and Health Disparities and the National Center for Human Genome Research (now NHGRI) were established. NIMH, NIDA and NIAAA were added to NIH. The Office of Alternative Medicine (now NCCAM), the Office of Research on Women's Health, the Office of Research on Minority Health (now NCMHD), the Office of Rare Diseases Research and the Office of Behavioral and Social Sciences Research all came into being. The National Center for Biotechnology Information at NLM, the IDEa program, the National Center on Sleep Disorders Research in NHLBI and the National Center for Medical Rehabilitation Research at NICHD were also created under the auspices of Kennedy's committee. He championed clinical research, loan repayment, health services research and protection of children through the Best Pharmaceutical

Act. He supported other senators who worked for mental health parity, muscular dystrophy research, spinal cord research and countless other causes.

Kennedy was a champion for cancer research early in his career and was the first member of Congress in 1971 to introduce legislation that came to be known as the War on Cancer. He was the primary sponsor of legislation to reauthorize NCI in 1974, which included the first clear and explicit authority regarding peer review after a Nixon administration proposal recommended abolishing the system. Through the years, he continued to support cancer research legislation and had been working with others on renewing the War on Cancer before he was struck down with it himself in May 2008.

In fall 1987, he addressed the advisory committee to the NIH director on America's "battle against AIDS," which he called "nothing less than a plague for our times. This growing national and global epidemic has already strained the capacity of the American people—and their leaders—to respond with common sense let alone compassion. I do not have to tell you that unwarranted fears about AIDS already account for a long list of senseless, individual tragedies—not just the loss of employment or housing by many people with AIDS, but their utter abandonment, even by their closest friends and family."

Also in 1987, Kennedy held the first-ever congressional hearing on AIDS, a disease he decided to



make the committee's "top priority."


When the NIH budget was doubled by Congress in 1998-2003, Kennedy was a firm supporter: "During the debate on the budget resolution...Sen. Connie Mack of Florida, Sen. Dianne Feinstein of California and I—and others—offered a bipartisan proposal to double NIH funds over the next 5 years...It is hard to imagine a more productive investment in the country's future," he said.

In 2003, when President Bush announced Project BioShield during an NIH tour, Kennedy, who sponsored and helped pass the legislation, was in attendance. Three years later, he played a crucial role in securing passage of the NIH Reform Act.

In 2008, when NICHD was renamed for his sister, Eunice Kennedy Shriver, Kennedy spoke at the ceremony and greeted NIH staff at a reception. Also last year, Kennedy saw the Genetic Information Nondiscrimination Act (GINA) signed into law after a legislative battle lasting 13 years. Kennedy, a co-sponsor, was a tireless supporter and activist for this bill, which he described as "the first major new civil rights bill of the new century."

Last spring, with Sen. Kay Bailey Hutchison (R-TX), Kennedy introduced new legislation to continue his campaign against cancer: the 21st Century Cancer ALERT (Access to Life-Saving Early Detection, Research and Treatment) Act.

Kennedy's feelings about NIH were summed up in a speech he gave here on Apr. 3, 1978, at the invitation of FAES: "As an institution, [NIH] has compiled an extraordinary record in our history. It embodies American society's most noble impulses, and guards our people's hopes for a better life."

In a statement issued at Kennedy's passing, NIH director Dr. Francis Collins noted, "Sen. Kennedy was an amazing man—a genuine force of nature. His deep compassion for those in need, and his commitment to improving people's health, are reflected in the innumerable legislative acts that he championed throughout his long, distinguished career in the Senate. He was one of the strongest, most effective advocates for biomedical research. I know I speak for everyone at NIH when I say that we lost one of our closest, dearest friends." 

Seasonal Flu Vaccine Schedule 2009

Flu immunizations can be provided only to NIH employees—NIH photo ID required.

On Campus

CRC 7th floor atrium, east side. The hours for all days are 8 to 11 a.m. and 1 to 3:30 p.m.

First Letter of Last Name Date

EFGH	Monday, Oct. 19
TUVWXYZ	Tuesday, Oct. 20
NOPQRS	Wednesday, Oct. 21
ABCD	Thursday, Oct. 22
IJKLM	Friday, Oct. 23
IJKLM	Monday, Nov. 2
NOPQRS	Tuesday, Nov. 3
ABCD	Wednesday, Nov. 4
TUVWXYZ	Thursday, Nov. 5
EFGH	Friday, Nov. 6

Off-Campus Sites

The hours for all sites except Poolesville are 8:30 to 11 a.m. and 1 to 3 p.m.

Location Date

Twinbrook 3, Rm. 2E06	Monday, Oct. 26
RKL I, Rm. 5054	Tuesday Oct. 27 & Wednesday, Oct. 28
EPN, Rm. 103	Thursday, Oct. 29 & Friday, Oct. 30
Neuroscience Center (TBA)	Monday, Nov. 9
Poolesville	Tuesday, Nov. 10 (9 to 10:30 a.m. in 103 10:30 a.m. to noon in 110)

Walk-in Clinic, OMS, Bldg. 10, Rm. 6C306

Open to all NIH employees Nov. 9-13, 7:30 to 11 a.m. and 1 to 3:30 p.m. After Nov. 16, flu vaccine will be available in OMS by appointment only. Call (301) 496-4411 to make an appointment.

NEI's eyeGENE Network Receives 1,000th Sample

By Allyson Collins

The National Ophthalmic Disease Genotyping and Phenotyping Network, known as eyeGENE, recently received its 1,000th blood sample for genetic eye disease testing.

NEI staff spearheaded the eyeGENE effort after holding a consensus meeting in 2003 with leading medical and ophthalmic geneticists from the

U.S., Canada and England. The group included experts in genetic counseling, bioethics and federal regulatory requirements as well as representatives from non-profit organizations interested in rare genetic diseases. The panel ultimately recommended creating the community resource that brings together medical professionals, vision scientists and individual genetic testing laboratories to advance patient care, education and research.

"Over the past decades, scientists have worked diligently to identify nearly 500 genes related to eye and vision disorders," says NEI director Dr. Paul Sieving. "Now, with the help of eyeGENE, the vision community can continue to advance its genetic research knowledge while offering patients the opportunity to receive a gene-based diagnosis."

The network responds to the needs of three groups: patients, clinicians and researchers. First, patients agree to contribute their clinical information and DNA to a protected, confidential registry from which they could be selected for future clinical trials. Then, eye or genetics health care providers submit patient blood samples to eyeGENE for molecular DNA diagnoses. In the near future, researchers will be able to access the network's secure database, which contains genotype and phenotype information that can be used to investigate the causes and cures of genetic eye disorders.

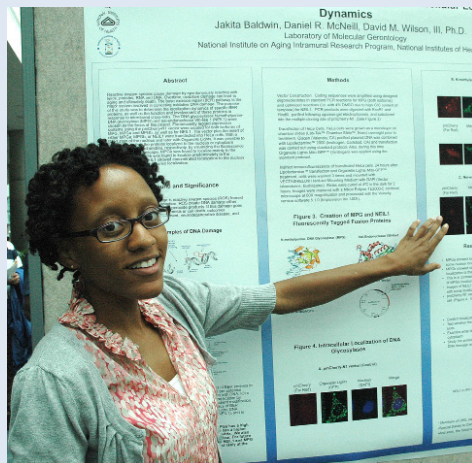
The network has grown significantly since it received the first sample in September 2006. More than 120 registered medical organizations and individual health care professionals throughout the U.S. and Canada are now participating. Participants submit more than 60 total samples per month to the eyeGENE Coordinating Center, which is currently hosted by NEI. The samples are distributed to one of 12 university and private facilities for testing.

Current testing capabilities of eyeGENE include more than 60 genes for more than 30 eye conditions, including many rare diseases such as retinitis pigmentosa and Stargardt disease. In the future, NEI will also house the eyeGENE repository for clinical information and DNA samples that will be accessible to researchers.

For more information about eyeGENE, visit www.nei.nih.gov/resources/eye-gene.asp.



Members of the eyeGENE operations working group and the NEI CLIA Diagnostic Laboratory include (seated, from l) Sally Vitez, eyeGENE research technician; Dr. Santa Tumminia, eyeGENE project officer; Kerry Goetz, eyeGENE Center coordinator. Standing are (from l) Delphine Blain, genetic counselor; Melissa Reeves, eyeGENE Center coordinator; Dr. Xinjing Wang, director, NEI CLIA Diagnostic Laboratory; Vida Ndifor, eyeGENE senior research assistant; Dr. Chris Antolik, senior biologist; and Jin Song, biologist.



POSTER DAY CONTINUED FROM PAGE 1

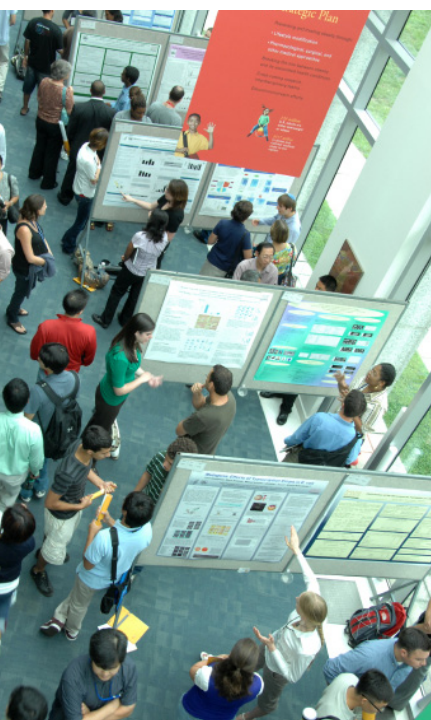
Above:
At left, Chicago native Jakita Baldwin says, "One of the best parts about working with the NIH was being exposed to some of the newest technology used in research."

At center, Meghan Hughes (r) explains her work to Dr. Lauren Wood of NCI.

At right, Marco Arias, originally from Bolivia, spent the summer in the immunoregulation unit of NIAMS's Autoimmunity Branch.

Below:
A bird's eye view of the scene on Poster Day 2009—more than 780 summer interns presented their work in the halls of the Natcher Bldg.

PHOTOS: BILL BRANSON, CARLA GARNETT



responded to the questionnaire. In addition, more than 93 percent of interns who presented posters felt the poster session was a valuable experience.

"I was initially very intimidated by all of the amazing work that came from people in this lab, and I was even more amazed by the fact that they were going to let me help out," noted Angela Voyles, who recently began her senior year as a neuroscience major at Vanderbilt. She worked this summer with Dr. Stephen Suomi, chief of NICHD's Laboratory of Comparative Ethology.

"It's been great to have first-hand experience in the things that I had only read about in textbooks," she continued. "Just about every day in this lab has been interesting. I've been able to feed infant monkeys, see the recording of EEGs and help conduct behavioral experiments. One of the best parts of this experience, however, has been that my mentor gave me the reins to an entirely new study of yawning in capuchin monkeys. I did all of the background research, planned the experiment and I've been collecting data on my own. It was really great to have that kind of freedom and responsibility."

What's next for her? "I know that I want to continue research in one way or another," she said. "I'm deciding between pursuing a Ph.D. in neuroscience or a combined M.D.-Ph.D. My long-term goal is to find a problem in neuroscience that intrigues me and needs to be solved, and then work my hardest to solve it. In 5 years I hope to be on my way to doing just that!"

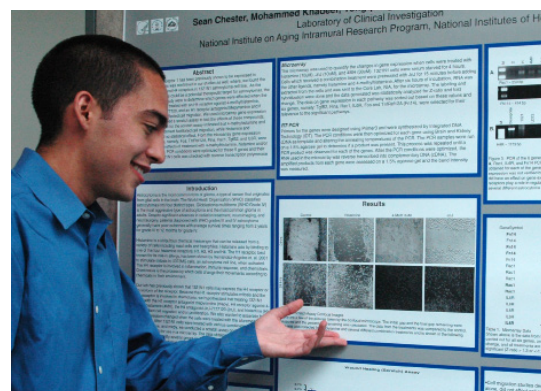
Detroit native Kim Golden had already experienced NIH extramural research when she was in high school. That's what sparked her interest in science. Then Walter Jones of the Clinical Center's diversity management and minority outreach department visited her school. "That made me want to find out about NIH and research," said Golden, now in her second year at Howard University School of Medicine.

On her application for the summer program, she listed pathology, diabetes and hypertension as areas of potential interest. However, she wound up spending the summer with Dr. Fran Sheehan in CC's department of rehabilitation medicine. "I had never considered rehab before, so this opened a whole new field for me," Golden noted. "My long-term career goal is to become a practicing physician in a medically underserved area."

Clinical work is also in the sights of Sean Chester, a junior majoring in biology at New Mexico Tech who worked this summer studying potential brain cancer therapies with Dr. Irving Wainer in the bioanalytical chemistry and drug discovery section of NIA's Laboratory of Clinical Investigation. "I want to go to med school," he said, "and start helping people."

He'd had research experience before coming here, but discovered his NIH lab seemed "a lot more sophisticated, more driven" than those he had worked in. "Here everyone has a clear goal that we're all working for, all focused on... We also have a lot more resources than in a university setting."

He, too, found the atmosphere at NIH noteworthy. "There were many things I liked about working at the NIH, the people, the facilities,



Sean Chester, a junior at New Mexico Tech, worked this summer studying potential brain cancer therapies.

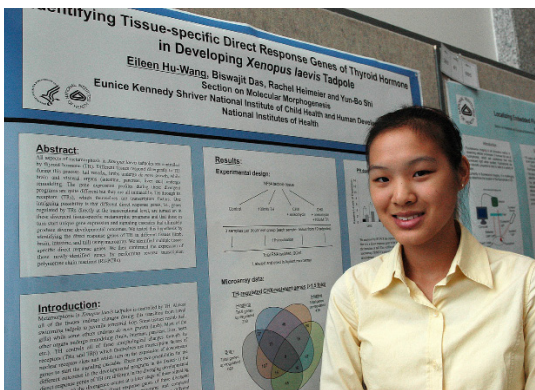


Detroit native Kim Golden had already experienced NIH extramural research when she was in high school. Now in her second year at Howard University School of Medicine, she got a taste of intramural NIH this summer.

etc.," he said, "but the thing I liked most was that the research wasn't just about getting results. There was a big focus on learning how to interpret the data and relate it to the bigger picture—previous findings, other labs' data. This helped me understand what I was doing better and helped improve my critical thinking skills."

Learning lab research techniques at NIH also helped focus the "bigger picture" for Eileen Hu-Wang, a Walt Whitman High School senior, who spent the summer working in the section on molecular morphogenesis of NICHD's Program in Cellular Regulation and Metabolism.

"I enjoyed getting full-time exposure to lab science and being able to observe and learn techniques that I cannot [get] in any course in high school," she said. "I also valued the experience of writing and presenting a formal poster for Poster Day, because through this process I learned more about my project. I began to recognize the bigger picture and significance of my project and...think about future experiments. Moreover, I enjoyed the lab environment, with different members very willing to help me with my experiments and patiently explaining any background information that I did not understand. I really enjoyed and appreciated the opportunity to be a summer intern at NIH."



Eileen Hu-Wang, a Walt Whitman High School senior, enjoyed getting full-time exposure to lab science.



Discussing the future of women's health at the recent ORWH panel were (from l) Dr. Celia J. Maxwell, Dr. Susan F. Wood and Dr. Kay Dickensin.

ORWH Panel Marks Women's Health Week

Three leaders in women's health recently issued a call to action to health care providers, researchers and women everywhere to take charge of women's health. The panel presentation and discussion, "The Intersection of Research, Policy, and Health Care for the Future of Women's Health" were part of NIH's observance of National Women's Health Week at NIH.

Dr. Kay Dickensin, director of the Center for Clinical Trials and director of the U.S. Cochrane Collaboration at Johns Hopkins University's Bloomberg School of Public Health, discussed a study published in the *Journal of the American Medical Association* that analyzed the number of women editors of epidemiology journals. Results showed that the proportion of women journal editors was far below women's representation in senior positions in epidemiology. She explained, "About half of epidemiology faculty members, authors, reviewers and first authors were women, so [the low numbers of women editors] was probably not due to the fact that we were not high enough on the 'totem pole' to be editors."

Dr. Celia Maxwell, assistant vice president for health affairs and director of the Women's Health Institute at Howard University, noted that as HIV/AIDS has become "more brown," less attention has been paid to the disease. She said that in 2006, new HIV infections for African-American women rose 27 percent, or 15,000 new infections in that year.

Nonetheless, Maxwell said that health care providers have become more experienced in treating HIV/AIDS in the African-American and female populations, clinical trials now include more women of color and child care and transportation issues are being addressed.

Dr. Susan F. Wood, director of the Jacobs Institute for Women's Health at George Washington University School of Public Health and Health Services, enumerated some of the challenges for the health care system in providing comprehensive coverage that focuses on the full range of women's health needs.

"Women have different health care needs than men," she said. She explained that women use the health care system more than men, due in part to women's reproductive health needs.

The panel presentations and discussion that followed ended on positive notes by recommending ways to address barriers such as reintroducing "the old girls' club" to create more time for in-depth discussions and increasing the availability of mentoring, leadership training and succession planning.—Dorie Hightower



SUICIDE STUDY

CONTINUED FROM PAGE 1

Discussing the Army/NIMH collaboration at a Pentagon media roundtable are (from l) Vice Chief of Staff of the Army Gen. Peter Chiarelli, Secretary of the Army Pete Geren, NIMH director Dr. Thomas Insel, principal investigator Dr. Robert Ursano, and co-principal investigators Dr. Ronald Kessler and Dr. Steven Heeringa.

PHOTO: KENNETH FRAGER, USUHS

the beginning of the current conflicts in Iraq and Afghanistan despite major surveillance and intervention efforts introduced by the Army to prevent suicides over this period.

"This is a matter of the highest urgency for the United States Army," said Army Secretary Pete Geren at the roundtable. "We are working at all levels to do everything we can to reverse this trend and we are excited about this partnership." Also representing the Army at the roundtable were Vice Chief of Staff Gen. Peter Chiarelli; Brig. Gen. Colleen McGuire, chief of the Army suicide prevention task force; Lt. Gen. Eric Schoomaker, Army surgeon general; and Lt. Gen. Mike Rochelle, deputy chief of staff for Army G-1 (the Army's human resources component).

There to discuss the scientific design of the study were NIMH director Dr. Thomas Insel and three of the four academic investigators of the study: principal investigator Dr. Robert Ursano of the Uniformed Services University of the Health Sciences; Dr. Ron Kessler, Harvard University; and Dr. Steven Heeringa, University of Michigan (co-principal investigator Dr. John Mann of Columbia University could not attend).

According to Insel, the study is in a sense "a Framingham study for mental health." The goal is to identify as quickly as possible risk and protective factors for suicide among soldiers and to provide a scientific basis for effective and practical interventions to reduce suicide rates and address associated mental health problems.

Insel pointed out that suicide is a large problem for the civilian sector as well as the military; in addition to providing information on risk and resilience for use in an Army context, the study will generate information that will be of great use for the nation.

Suicide is the fourth leading cause of death among 25- to 44-year-olds in the United States. Historically, the suicide rate has been lower in

the military than among civilians. In 2008, that pattern was reversed, with the suicide rate in the Army exceeding the age-adjusted rate in the civilian population (20.2 out of 100,000 vs. 19.2). While the stresses of the current wars in Iraq and Afghanistan, including long and repeated deployments and traumatic stress, are important potential risk factors to address, suicidal behavior is a complex phenomenon. The study will examine a wide range of factors related to and independent of military service, including unit cohesion, exposure to combat-related trauma, personal and economic stresses, family history, childhood adversity and abuse and overall mental health.

This research will encompass active duty Army personnel across all phases of service, including members of the National Guard and Reserves. Soldiers' confidentiality will be protected as investigators explore the nature of risk and protective factors and the timing of events that could influence risk such as time since enlistment and deployment status and history.

The study will have several different components including reviews of archival data, baseline and follow-up surveys of active Army personnel and a retrospective case-control study of individual soldiers who have attempted or completed suicide. In some cases, saliva and blood samples will be collected for genetic and neurobiologic studies aimed at providing information on differences in emotional regulation that could lead to suicide.

Among the protective factors the study will examine are the programs already undertaken by the Army to foster mental health and resilience. Chiarelli, who is head of the Army campaign plan for health promotion, risk reduction and suicide prevention, said the Army wants "the scientific evidence" on what is working and what is not in their health promotion efforts. "We know this study will help inform how we implement that program down the road," he added.

In order to make information from the study available to the Army quickly, the study plan includes progress reports on important emerging findings every 6 months with the first report coming this November. According to Insel, "We will be working as quickly as possible to give Gen. Chiarelli everything we can find out." ■

milestones

Wang Named NIMH Deputy Director

Dr. Philip S. Wang has been named deputy director of the National Institute of Mental Health. A psychiatrist, he had been director of NIMH's Division of Services and Interventions Research (DSIR) since 2006.



Before joining NIMH in 2006, Wang was on the faculty at Harvard Medical School in psychiatry and health care policy, where he was an NIMH grantee and one of the nation's leaders in health services research and the economics and epidemiology of medication treatment.

"During the past 2½ years, Phil has repositioned DSIR to support innovative and high-impact research for diverse populations with mental disorders," said NIMH director Dr. Thomas Insel. "Among recent notable initiatives are efforts on cost-effectiveness models, adapting state mental health systems as experimental laboratories for health care reform and the collaborative Army study on suicide, the largest such effort in NIMH history."

Wang is a recipient of the American Psychiatric Association's Health Services Research Scholar Award and is one of the most highly cited scientists in areas as diverse as depression in the workplace and noncompliance with anti-hypertensive medications.

"His interests in comparative effectiveness, mental health care reform and health disparities make him an ideal leader for the NIMH in this era," said Insel.

Wang completed his undergraduate, medical school, psychiatry residency as well as master's and doctoral training in epidemiology at Harvard University. He was principal investigator of the NIMH-sponsored Work Outcomes Research and Cost-effectiveness Study, a large-scale trial to examine the return-on-investment of enhanced depression care for workers. He also served as a voting member on FDA's psychopharmacologic and endocrinologic and metabolic drugs advisory committees, its neurological devices panel and on the NIMH services research and clinical epidemi-

ology study section. He currently chairs the WHO world mental health study services research work group. Wang is an author of approximately 150 scientific publications.

Nilsen Joins OBSSR

Dr. Wendy Nilsen recently joined NIH's Office of Behavioral and Social Sciences Research as a health science administrator. She brings a strong background in clinical psychology with an emphasis on children in the child welfare and court systems. Her diverse work history includes research and community consultation and training, as well as committee positions in New York State's child welfare system. Previously, she was an assistant professor of psychiatry at the University of Rochester School of Medicine and Dentistry. At OBSSR she will focus on the science of behavior change.



Nilsen received her Ph.D. in clinical psychology from Purdue University. She also completed a National Research and Service Award postdoctoral fellowship at the University of Rochester. Her training in clinical psychology focused on developmental psychopathology with an emphasis on child maltreatment and family systems.

Nilsen's research has focused on the psychological and social functioning of children and families involved in the child welfare (Child Protective Services and foster care) and court systems. She has been the principal investigator on multiple studies, including a Patient-Oriented Career Award from NIMH. Active research areas include interventions to improve the functioning of school-age youth in foster care, evaluation of community-based child abuse programs, cross-cultural assessments of childhood sexual abuse and the relationship between trauma exposure, family functioning and current psychological status.

In New York, Nilsen has also been an active member of numerous committees targeting the lives of children and families. In 2007, she was appointed to serve on the New York State Citizen's Commission, which provides congressionally mandated oversight for the child welfare system. She also was the co-leader of the Babies Can't Wait/Teens Won't Wait program, a continuing education program focusing on the needs of maltreated children and adolescents.

NIDDK's Jacobson Honored by Societies

Dr. Kenneth A. Jacobson, chief of the Laboratory of Bioorganic Chemistry and the molecular recognition section, was inducted into the American Chemical Society's Medicinal Chemistry Hall of Fame Aug. 19 at the society's annual meeting. Jacobson, one of only four NIH researchers—all at NIDDK—ever to receive this honor, was recognized for his contributions to the pharmacology of purinergic cell surface receptors and their major impact on the development of potential new therapies. His research has led to experimental drugs in clinical trials or under preclinical consideration for cystic fibrosis, liver cancer, rheumatoid arthritis, psoriasis, dry-eye disease, blood-flow blockage to the heart, stroke and asthma. His work was also recently recognized with the Pharmacology-ASPET Award in Experimental Therapeutics from the American Society for Pharmacology and Experimental Therapeutics and with the Sato Memorial International Award from the Pharmaceutical Society of Japan and the Foundation for Advanced Education in the Sciences.





Dr. William D. Matthew

Matthew To Direct NINDS Translational Research

By Shannon Garnett

NINDS recently named Dr. William D. Matthew as director of its Office of Translational Research (OTR). He will lead the institute's efforts to translate results of laboratory research into treatments for neurological disorders.

"Moving treatments for neurological disorders from the lab bench to the bedside is one of the most important missions of the NINDS and also our most formidable challenge," said NINDS director Dr. Story Landis. "Dr. Matthew's experience in academic research and in drug development—and especially his ability to bridge those two worlds—will energize and focus our translational research efforts."

An untold number of potential therapeutic drugs disappear into a critical gap between academia and industry. NINDS's OTR aims to close this gap and accelerate drug development for neurological disorders. OTR replaces NINDS's Office of Technology Development and will build on the institute's existing programs in translational neuroscience research. Matthew was selected to lead OTR because his career ranges from academic neuroscience research to all stages of the drug development process.

Before joining NINDS, he was vice president of R&D partnering and business development at UCB, an international biopharmaceutical company based in Brussels. He earned his Ph.D. in biochemistry from the University of California, San Francisco, and has served on the faculties of Harvard Medical School and Duke University Medical Center.

Early in his career, Matthew helped pioneer the use of antibodies as tools for neuroscience research and as therapies for neurological disease. As a doctoral student, he developed antibodies that could be used to isolate and characterize proteins inside nerve cells. As a professor at Harvard, he was among the first to develop antibodies that modulate the function of proteins critical for neural activity. Antibodies of this kind are now used to treat multiple sclerosis and are under investigation in patients with Alzheimer's disease.

In 1990, Matthew moved to Duke to help establish the neurobiology department. In 1998, he became scientific director of the George and Jean Brumley Neonatal-Perinatal Research Institute in Duke's department of pediatrics.

In 2001, Matthew was recruited to Schwarz Pharma, a mid-sized German-based drug com-

pany. He played an integral part in building Schwarz Biosciences, a new research and development division. During his tenure, Schwarz Pharma developed three new drug products for U.S. and European markets: Neupro (rotigotine)—a skin patch for stable, continuous relief from the symptoms of Parkinson's disease; Vimpat (lacosamide)—a drug for treatment-resistant epilepsy; and Toviaz (fesoterodine)—a drug for symptomatic relief from overactive bladder.

As director of OTR, Matthew will oversee several NINDS and NIH-wide translational research initiatives, including the NINDS Cooperative Program in Translational Research and the NINDS Anticonvulsant Screening Program.

"In the time since I began my career, neuroscientists have gained key insights into many neurological disorders and created many opportunities for new treatments," said Matthew. "My goal is to tap into the unique strengths of researchers, physicians, patient advocacy groups and industry and government leaders so that we can turn those opportunities into realities."

Intern Awards Recipients Unveiled at Graduation Ceremony

The NIH Training Center and administrative training committee recently held the 51st annual NIH Intern graduation ceremony for the intern class of 2009. The Intern Programs graduated its first class of administrative fellows, making this year's graduating class the largest yet with 66 graduates. Each year, the training committee presents awards to graduating interns, their mentors and supervisors who have all contributed to the development and overall success of the programs. The following interns and supporters received awards:

Intern of the Year—Virginia Hill, presidential management fellow (PMF).

Intern Innovator—Molly Puente, PMF

Intern Collaborator—Jacob Hoots (PMF) and Sheria Washington, management intern (MI)

Intern Leader—Rebecca Brown (PMF) and Justin Hentges, administrative fellowship program (AFP)

Peer Recognition—Virginia Hill (PMF),

William Martin (AFP) and Jessica Ryan (MI)

Outstanding Supervisor—Ellen Rolfes (NHGRI) and LaVerne Stringfield (OD)

Outstanding Mentor—Denise Fioravante, NIA and Anita Linde, NIAMS

Outstanding Advocate—Tim Wheelles, NHLBI

digest

NIBIB Scientists Combine Microscopy Methods to Increase Imaging Efficiency in Cell Structure Studies

Scientists in the National Institute of Biomedical Imaging and Bioengineering's Laboratory of Bioengineering and Physical Science have developed a new technique that allows researchers to visualize fine details of cell structure 3-dimensionally in thick sections, thus providing greater insight into how cells are organized and how they function. The work is described in a report published online Sept. 3 in *Nature Methods*.

The new electron tomography method, referred to as BF STEM tomography, lets researchers image samples that are more than three times the thickness of typical samples.

Electron tomography is carried out at the nanoscale on individual cells. Conventionally, high-resolution imaging of biological specimens has been accomplished by cutting cells into thin sections (300 nanometers or less) and imaging each section separately. Although reconstructing an entire structure from thin sections is laborious, thin sections are used because images of thicker sections typically are blurred. Serial BF STEM tomography accomplishes the same work using fewer yet thicker specimen sections, leading to faster reconstruction of intact organelles, intracellular pathogens and even entire mammalian cells.

Drs. Alioska Sousa, Martin Hohmann-Marriott, Richard Leapman and colleagues in NIBIB, in collaboration with Dr. Joshua Zimmerberg and colleagues at NICHD, demonstrated feasibility and advantages of BF STEM tomography in a study of red blood cells. High-resolution 3D reconstructions of entire cells were generated by serially imaging just a few thick sections. The intricate system of red blood cell and parasite membranes, as well as several organelles, can be seen in detail.

MicroRNAs in Blood May Be Biomarkers of Pancreatic Cancer

Small molecules known as microRNAs, which can be detected in blood samples, have the potential to help identify patients with pancreatic cancer, a study finds. The study, by researchers at the University of Texas M.D. Anderson Cancer Center in Houston, was sup-

ported by the Early Detection Research Network of the National Cancer Institute. The paper appeared online Sept. 1 in *Cancer Prevention Research*.

Pancreatic cancer is a highly fatal disease that is difficult to detect at early stages. In most patients, symptoms do not appear until the cancer is locally advanced or has spread to other parts of the body. The absence of symptoms in early-stage disease and the current lack of effective, minimally invasive screening and diagnostic techniques limit the available treatment options. Both contribute to the high mortality rate observed for patients with pancreatic cancer.

"The development of a minimally invasive test for the early detection and diagnosis of pancreatic cancer is greatly needed," said Dr. Sudhir Srivastava of NCI's Division of Cancer Prevention. "An important step is to identify biomarkers for pancreatic cancer, such as microRNAs, circulating in the bloodstream that can be used to distinguish individuals with pancreatic cancer from individuals without the disease."

Studies in Animals Suggest 2009 H1N1 Virus May Have Biological Advantage Over Seasonal Influenza Viruses

Preliminary findings in ferrets suggest that the novel 2009 H1N1 influenza virus may out-compete human seasonal influenza viruses, researchers say. Tests in animals showed that levels of the 2009 H1N1 virus rose more quickly than levels of the seasonal virus strains, and the new virus caused more severe disease. In line with previous findings by other research groups, the University of Maryland researchers also observed that the novel H1N1 virus was transmitted more easily from infected to uninfected ferrets than either of the two seasonal influenza viruses.

The researchers found no evidence that the 2009 H1N1 virus combined with either of two seasonal flu viruses to form new, so-called reassortant viruses. These findings suggest that while 2009 H1N1 virus probably will predominate in the coming flu season, there may not be biological pressure for the new virus to recombine with other circulating viruses, the researchers say.

The work was done by Dr. Daniel Perez and colleagues from the University of Maryland and was supported by the National Institute of Allergy and Infectious Diseases. Results appeared in *PLoS Currents: Influenza*, a web site for rapid communication of new scientific data on influenza.



Small molecules known as microRNAs, which can be detected in blood samples, have the potential to help identify patients with pancreatic cancer, an NCI-supported study finds.



FAES Celebrates 50th Anniversary with Backyard Carnival

PHOTOS: VALERIE LAMBROS

The Foundation for Advanced Education in the Sciences, Inc., (FAES), an organization created at NIH on July 2, 1959, to preserve continuing education, celebrated its 50th anniversary all summer long with ice cream socials at various buildings on campus and off, and a final carnival held Aug. 28 on the south side parking lot outside of the Clinical Center. At all events, passersby could join FAES and register for classes. The carnival also included a barbecue lunch, portrait sittings with caricature artists and a raffle. Celebrations continue into next year: FAES plans a special event to coincide with its board meeting in April 2010.

Membership in FAES is open to NIH personnel and alumni, as well as to persons at nearby scientific institutions who are interested in the educational goals and activities of FAES and would like to participate.

For more information on the organization, visit www.faes.org/index.htm.



Above, carnival-goers line up for raffle tickets at an FAES 50th anniversary celebration held Aug. 28 behind the Clinical Center.

Below (left), the serving line gets busy as carnival-goers get hamburgers, hot dogs, barbecued chicken, corn on the cob, macaroni and cheese, salad and baked beans. At right, NIH'ers sign up for raffle tickets and put their names on mailing lists.

Bottom: At left, Angelo Parker and Donnie Brashears (l) sit for their caricature portraits. At right, the grill works overtime to feed all the people who stopped by the FAES carnival tent.

